

(10)日本国特許庁 (JP)

(12) 公開実用新案公報 (U)

(11)実用新案出願公開番号

実開平5-50428

(13)公開日 平成5年(1993)7月2日

(51)Int.Cl.*	識別記号	府内整理番号	F I	技術表示箇所
G 0 2 F 1/1333		8806-2K		
G 0 6 F 15/02	3 1 5 A	9194-5L		
G 0 9 F 9/00	3 5 0	8447-5G		

審査請求 未請求 請求項の数1(全3頁)

(21)出願番号 実開平3-102496

(22)出願日 平成3年(1991)12月12日

(71)出願人 000003662

東京電気株式会社

東京都目黒区中目黒2丁目6番13号

(72)考案者 長島 かおる

静岡県三島市南町6番78号 東京電気株式

会社三島工場内

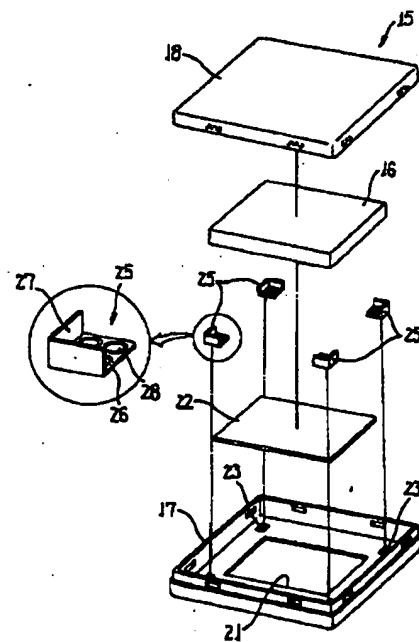
(74)代理人 弁理士 柏木 明

(54)【考案の名称】 表示装置

(57)【要約】

【目的】 接合する上部カバーと下部カバーとでディスプレイパネルを挟持する構造の表示装置の生産性と信頼性と向上させる。

【構成】 上部カバー17の内面に固定的に取付けられる弾性部材25にディスプレイパネル16を外縁部との当接で位置決め保持する保持部27と前記ディスプレイパネル16の一面に弾発的な押圧状態で吸着する吸盤部28とを形成した。



(2)

実開平5-50428

【実用新案登録請求の範囲】

【請求項1】 一方側が開口した枠状の下部カバーと、この下部カバーの内面で他面が支持される平板状のディスプレイパネルと、このディスプレイパネルの一面の表示部と対向する開口窓が形成されて前記下部カバーに外周部で接合される枠状の上部カバーと、この上部カバーの開口窓を形成した周縁部の内面に固定的に取付けられる装着部を本体部の一面に形成すると共に前記ディスプレイパネルを外縁部との当接で位置決め保持する保持部を前記本体部から内方に向けて突設すると共に前記ディスプレイパネルの一面に発発的な押圧状態で吸着する吸盤部を前記本体部の他面に一体形成した弾性材部品とよりなり、前記ディスプレイパネルを二個の前記カバー内に支持したことを特徴とする表示装置。

【図面の簡単な説明】

【図1】本考案の実施例を示す分解斜視図である。

【図2】組立工程の一部を示す縦断側面図である。 *

* 【図3】機器の外観を示す斜視図である。

【図4】従来例を示す縦断側面図である。

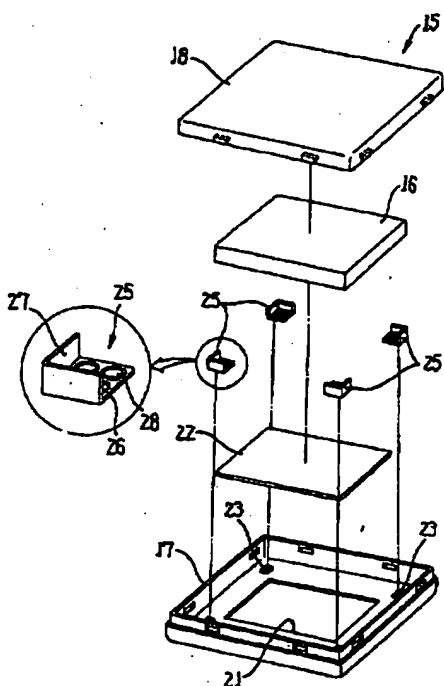
【図5】ディスプレイパネルを示す平面図である。

【図6】拡大したディスプレイパネルの要部を示す斜視図である。

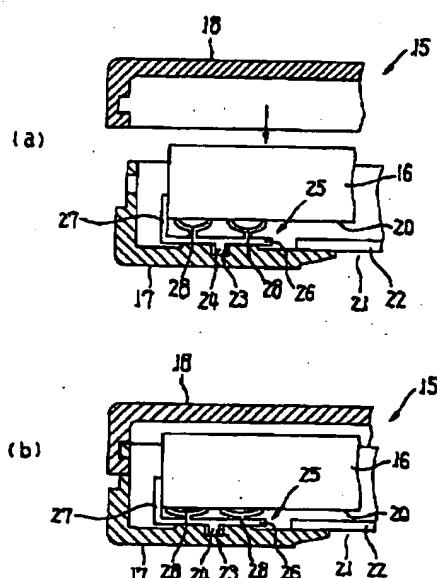
【符号の説明】

15	表示装置
16	ディスプレイパネル
17	上部カバー
18	下部カバー
20	表示部
21	開口窓
24	装着部
25	弾性材部品
26	本体部
27	保持部
28	吸盤部

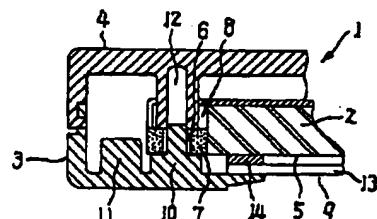
【図1】



【図2】



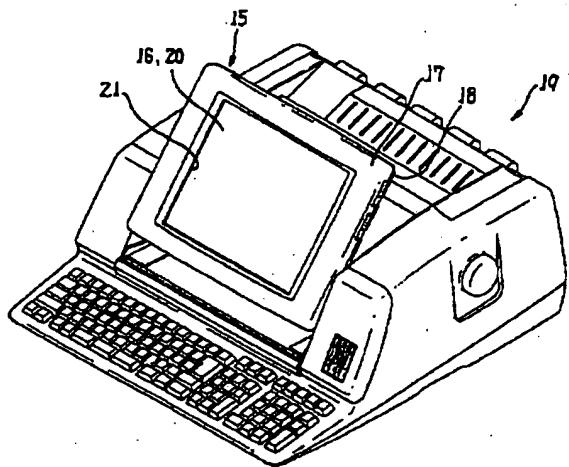
【図4】



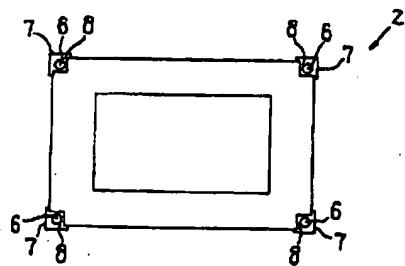
(3)

実開平5-50428

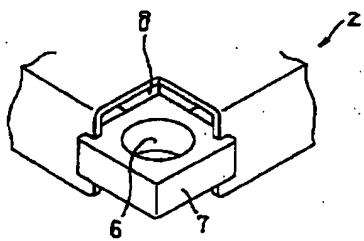
【図3】



【図5】



【図6】



(4)

実開平5-50428

【考案の詳細な説明】**【0001】****【産業上の利用分野】**

本考案は、平板状のディスプレイパネルを上部カバーと下部カバーとの間に配置した構造の表示装置に関するものである。

【0002】**【従来の技術】**

表示装置の従来例を図4ないし図6に基づいて説明する。まず、この表示装置1は、図4に例示するように、平板状のディスプレイパネルであるLCD(Liquid Crystal Display)2を上部カバー3と下部カバー4との間に配置した構造となっており、例えば、パソコン用コンピュータ(図示せず)などの表示装置に用いられている。ここで、この表示装置1のLCD2は略中央部に表示部5が位置する長方形の平板状に形成されており、図5及び図6に例示するように、各々貫通孔6が形成されたモールド製の支持板7が四隅の切欠部8に固定されている。そして、この表示装置1では、図4に例示したように、前記LCD2の表示部5と対向する開口窓9が前記上部カバー3に形成されており、この上部カバー3の裏面四隅には円筒形の段付きボス10と壁状のリブ11とが突設されている。そこで、この表示装置1では、前記上部カバー3のリブ11が前記LCD2の支持板7の角部に当接すると共に前記段付きボス10が前記LCD2の支持板7の貫通孔6に嵌合しており、この段付きボス10上に嵌合した前記LCD2の支持板7が前記下部カバー4の表面に当接された中空ボス12で保持されている。なお、この表示装置1では、前記上部カバー3の開口窓9にはアクリル樹脂板等からなる透光板13が装着されており、この透光板13の裏面と前記LCD2の表面との間にはスポンジテープ等の弾性材からなるパッキン14が装着されている。

【0003】

このような構成において、この表示装置1では、上部カバー3の開口窓9にLCD2の表示部5が対向しているので、このLCD2の表示部5の表示画像を上部カバー3の開口窓9から視認することができる。

(5)

実開平5-50428

【0004】**【考案が解決しようとする課題】**

上述した表示装置1では、上部カバー3の開口窓9に表示部5が対向するようLCD2をカバー3、4間に配置するようになっており、このようにLCD2を位置決め保持するため、上部カバー3の段付きボス10とリブ11とに嵌合する支持板7をLCD2の四隅の切欠部8に固定している。

【0005】

しかし、これではLCD2の四隅に切欠部8を切削加工等で形成してから別部品である支持板7を固定することになるので、その加工作業が煩雑であると共に部品数が増加して好ましくない。

【0006】

また、上述した表示装置1では、上部カバー3とLCD2との間にパッキン14を圧入することで振動等によるLCD2のガタつきを防止しているが、このように配置したパッキン14はLCD2の前後方向の変位は防止しても面方向の変位は防止できないので、実際にはカバー3、4内でLCD2が面方向にガタつくなどしてLCD2の位置ずれによる表示装置1の組立上の信頼性が低下している。なお、ここで云う面方向とは、LCD2の表面と平行な二次元方向を意味している。

【0007】**【課題を解決するための手段】**

一方側が開口した棒状の下部カバーを設け、この下部カバーの内面で他面が支持される平板状のディスプレイパネルを設け、このディスプレイパネルの一面の表示部と対向する開口窓が形成されて前記下部カバーに外周部で接合される棒状の上部カバーを設け、この上部カバーの開口窓を形成した周縁部の内面に固定的に取付けられる装着部を本体部の一面に形成すると共に前記ディスプレイパネルを外縁部との当接で位置決め保持する保持部を前記本体部から内方に向けて突設すると共に前記ディスプレイパネルの一面に弾発的な押圧状態で吸着する吸盤部を前記本体部の他面に一体形成した弹性材部品を設け、前記ディスプレイパネルを二個の前記カバー内に支持した。

(6)

実開平5-50428

【0008】**【作用】**

弾性材部品はディスプレイパネルを保持部で位置決めすると共に吸盤部で弾発保持することができ、従来の表示装置のようにディスプレイパネルの四隅を切削加工して別部品を固定するような必要がないので生産性が良好であり、さらに、弾性材部品は保持部と吸盤部とでディスプレイパネルを前後方向と面方向との両方で変位不能に弾発保持することができるので、カバー内でディスプレイパネルがガタつくことが防止されて組立上の信頼性も良好である。

【0009】**【実施例】**

本考案の実施例を図1ないし図3に基づいて説明する。まず、この表示装置15は、ディスプレイパネルであるLCD16を上部カバー17と下部カバー18との間に配置した構造となっており、図3に例示するように、ここではパソコン用コンピュータ19の表示装置として設けられている。

【0010】

ここで、この表示装置15では、図1及び図2に例示するように、LCD16は略中央部に表示部20が位置する長方形の平板状に形成されており、この表示部20と対向する位置に形成された前記上部カバー17の長方形の開口窓21には透光板22が装着されている。そして、この表示装置15では、前記上部カバー17の裏面四隅に凹部23が形成されており、この凹部23に係脱自在に嵌合する装着部である凸部24が弾性材部品である取付けゴム25の表面に形成されている。ここで、この取付けゴム25は、矩形平板状の本体部26の裏面の二つの連続する外縁部に壁状の保持部27が立設されており、前記本体部26の裏面の略全域に四つの吸盤部28が突設されている。

【0011】

そして、この表示装置15では、前記上部カバー17の凹部23に凸部24の嵌合で固定的に装着された前記取付けゴム25の保持部27が前記LCD16の四隅の外縁部に当接すると共に前記吸盤部28が前記LCD16の四隅の表面に吸着することで、このLCD16は裏面が前記下部カバー18の表面に当接した

(7)

実開平5-50428

状態で前記取付けゴム25の保持部27で位置決めされて吸盤部28で弾発的に保持されている。

【0012】

このような構成において、この表示装置15では、上部カバー17の開口窓21にLCD16の表示部20が対向しているので、このLCD16の表示部20の表示画像を上部カバー17の開口窓21から視認することができる。

【0013】

なお、この表示装置15を組立てる場合は、図2(a)に例示したように、凹部23に凸部24を嵌合させることで上部カバー17の四隅に取付けゴム25を装着し、この取付けゴム25の吸盤部28上にLCD16を載置する。そして、この状態でLCD16上から下部カバー18を上部カバー17に接合することで、同図(b)に例示したように、表面に密着する取付けゴム25の吸盤部28の弾发力によってLCD16は下部カバー18の表面に押圧保持されることになる。

【0014】

ここで、この表示装置15では、上述のように上部カバー17の凹部23に凸部24の嵌合で固定的に装着された取付けゴム25が、LCD16を保持部27で位置決めすると共に吸盤部28で弾発保持している。このようにすることで、この表示装置15では、前述した従来の表示装置1のようにLCD2の四隅を切削加工して別部品を固定するようなことを要しないので、その製作が容易で部品数も低減されている。さらに、この表示装置15では、取付けゴム25は保持部27と吸盤部28とでLCD16を前後方向と面方向との両方で変位不能に弾発保持するようになっているので、カバー17, 18内でLCD16がガタつくことが防止されて組立上の信頼性が良好である。

【0015】

なお、本実施例の表示装置15では、平板状のディスプレイパネルとしてLCD16を例示したが、本考案はプラズマディスプレイやエレクトロクロミックディスプレイなどにも適用可能である。

【0016】

【考案の効果】

(8)

実開平5-50428

本考案は上述のように、一方側が開口した棒状の下部カバーを設け、この下部カバーの内面で他面が支持される平板状のディスプレイパネルを設け、このディスプレイパネルの一面の表示部と対向する開口窓が形成されて前記下部カバーに外周部で接合される棒状の上部カバーを設け、この上部カバーの開口窓を形成した周縁部の内面に固定的に取付けられる装着部を本体部の一面に形成すると共に前記ディスプレイパネルを外縁部との当接で位置決め保持する保持部を前記本体部から内方に向けて突設すると共に前記ディスプレイパネルの一面に弾発的な押圧状態で吸着する吸盤部を前記本体部の他面に一体形成した弹性材部品を設け、前記ディスプレイパネルを二個の前記カバー内に支持したことにより、この弹性材部品はディスプレイパネルを保持部で位置決めすると共に吸盤部で弾発保持することができ、従来の表示装置のようにディスプレイパネルの四隅を切削加工して別部品を固定するような必要がないので生産性が良好であり、さらに、弹性材部品は保持部と吸盤部とでディスプレイパネルを前後方向と面方向との両方で変位不能に弾発保持することができるので、カバー内でディスプレイパネルがガタつくことが防止されて信頼性も良好である等の効果を有するものである。

(19) JAPANESE PATENT OFFICE (JP)

(12) Publication of Unexamined Utility Model Application (KOKAI) (U)

(11) Japanese Utility Model Application Kokai Number: **H5-50428**

(43) Kokai Publication Date: July 2, 1993

(51) Int. Cl. ⁵	Identification Symbol	JPO File No.	F1	Technical Indication
G 02 F 1/1333		8806-2K		
G 06 F 15/02	315	A 9194-5L		
G 09 F 9/00	350	6447-5G		

Request for Examination: Not requested

Number of Claims: 1

(3 pages total)

(21) Application Number: H3-102496

(71) Applicant: 000003562

Tokyo Electric Co., Ltd.

2-6-13 Nakameguro, Meguro-ku, Tokyo

(22) Filing Date: December 12, 1991

(72) Creator: Kaoru Nagashima

c/o Tokyo Electric Co., Ltd., Mishima Plant
6-78 Minami-cho, Mishima-shi, Shizuoka

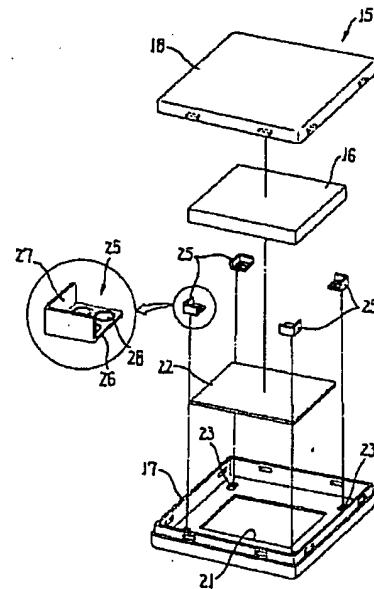
(74) Agent: Akira Kashiwagi, Patent Attorney

(54) [Title of the Device] DISPLAY DEVICE

(57) [Abstract]

[Object] [The object of the present device is] to improve the productivity and reliability of a display device that has a structure in which a display panel is clamped by a joined upper cover and lower cover.

[Constitution] Holding parts 27 that position and hold the display panel 16 in contact with the outer edge parts, and suction disk parts 28 that are attached by suction in a resilient compressed state to one surface of the above-mentioned display panel 16, are formed on elastic members 25 that are attached in a fixed state to the inside surface of the upper cover 17.



[Claims]

[Claim 1] A display device which is characterized by the fact that [A] this display device comprises: a frame-form lower cover which is open on one side; a flat-plate-form display panel whose second surface* is supported by the inside surface of this lower cover; a frame-form upper cover in which an opening window that faces the display part on the first surface* of the above-mentioned display panel is formed, and which is joined to the above-mentioned lower cover at the outer peripheral parts [of this upper cover]; and elastic parts in which [i] a mounting part that is attached in a fixed manner to the inside surface of the peripheral edge part in which the opening window of the above-mentioned upper cover is formed is formed on one surface of a main body part, [ii] a holding part that positions and holds the above-mentioned display panel in contact with the outer edge part is caused to protrude inward from the above-mentioned main body part, and [iii] suction disk parts that are attached by suction in a resilient compressed state to one surface of the above-mentioned display panel are integrally formed on the other surface of the above-mentioned main body part, and [B] the above-mentioned display panel is supported inside the above-mentioned two covers.

[Brief Description of the Drawings]

[Figure 1] Figure 1 is an exploded perspective view which shows an embodiment of the present device.

[Figure 2] Figure 2 is a longitudinal sectional side view which shows a portion of the assembly process.

[Figure 3] Figure 3 is a perspective view which shows the external appearance of the device.

[Figure 4] Figure 4 is a longitudinal sectional side view which shows a conventional example.

[Figure 5] Figure 5 is a plan view which shows the display panel.

[Figure 6] Figure 6 is a perspective view which shows essential parts of the display panel in an enlargement.

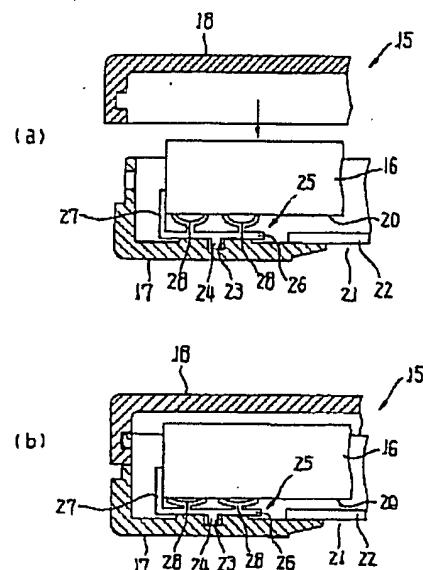
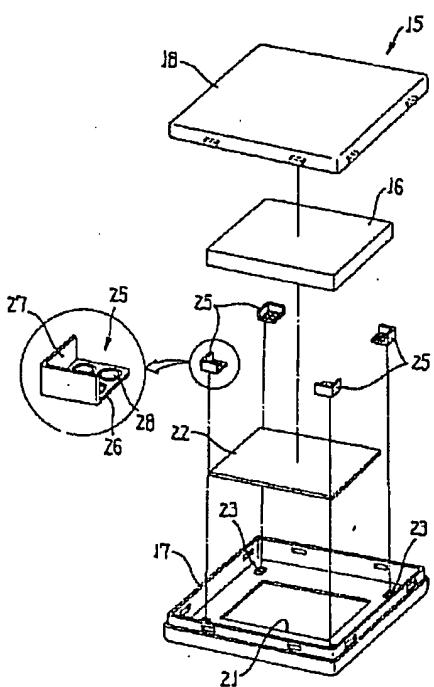
[Explanation of Symbols]

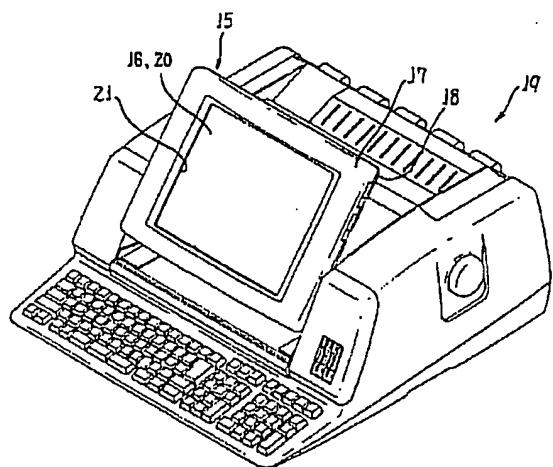
15: Display device

16: Display panel

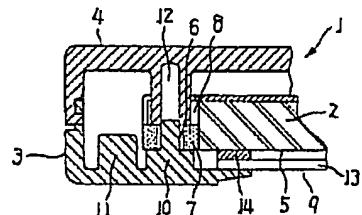
* Translator's note: The phrases "second surface" and "first surface" in this paragraph and in paragraphs 0007 and 0016 are actually described as "the other surface" and "one surface," respectively, in the Japanese source document, with "the other surface" appearing before "one surface."

- 17: Upper cover
- 18: Lower cover
- 20: Display part
- 21: Opening window
- 24: Mounting parts
- 25: Elastic parts
- 26: Main body parts
- 27: Holding parts
- 28: Suction disk parts

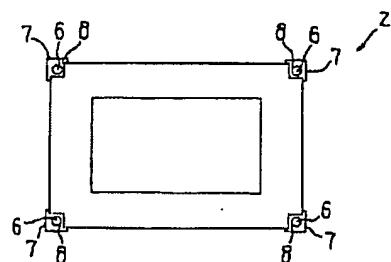




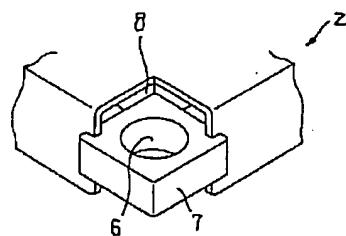
[Figure 3]



[Figure 4]



[Figure 5]



[Figure 6]

[Detailed Description of the Device]

[0001]

[Field of Industrial Utilization]

The present device relates to a display device having a structure in which a flat-plate-form display panel is disposed between an upper cover and a lower cover.

[0002]

[Prior Art]

A conventional example of a display device will be described with reference to Figures 4 through 6. As in the example shown in Figure 4, this display device 1 has a structure in which an LCD (liquid crystal display) 2 constituting a flat-plate-form display panel is disposed between an upper cover 3 and a lower cover 4. For example, this display device is used as the display device of a personal computer (not shown in the figures), etc. Here, the LCD 2 of this display device 1 is formed in a rectangular flat plate shape in which a display part 5 is positioned in substantially the central part [of the LCD]. As exemplified in Figures 5 and 6, molded supporting plates 7 in which respective through-holes 6 are formed are fastened to cut-out parts 8 in the four corners [of the LCD 2]. Furthermore, in this display device 1, as indicated in the example shown in Figure 4, an opening window 9 that faces the display part 5 of the above-mentioned LCD 2 is formed in the above-mentioned upper cover 3, and cylindrical stepped bosses 10 and wall-form ribs 11 are caused to protrude from the four corners on the back surface of this upper cover 3. Accordingly, in this display device 1, the ribs 11 of the above-mentioned upper cover 3 contact the corner parts of the supporting plates 7 of the above-mentioned LCD 2, and the above-mentioned stepped bosses 10 engage with the through-holes 6 of the supporting plates 7 of the above-mentioned LCD 2; furthermore, the supporting plates 7 of the above-mentioned LCD 2 that are engaged on these stepped bosses 10 are held by hollow bosses 12 that are caused to contact the surface of the above-mentioned lower cover 4. Moreover, in this display device 1, a light-transmitting plate 13 consisting of an acrylic resin plate, etc., is mounted in the opening window 9 of the above-mentioned upper cover 3, and packing 14 consisting of an elastic material such as a sponge tape is mounted between the back surface of this light-transmitting plate 13 and the surface of the above-mentioned LCD 2.

[0003]

In the case of such a construction, the display part 5 of the LCD 2 faces the opening window 9 of the upper cover 3 in this display device 1. Accordingly, the display image of the display part 5 of this LCD 2 can be viewed via the opening window 9 in the upper cover 3.

[0004]

[Problems that the Device is to Solve]

In the above-mentioned display device 1, the LCD 2 is disposed between the covers 3 and 4 so that the display part 5 faces the opening window 9 in the upper cover 3. In order to position and hold the LCD 2 in this manner, supporting plates 7 that are engaged with stepped bosses 10 and ribs 11 on the upper cover 3 are fastened to cut-out parts 8 formed in the four corners of the LCD 2.

[0005]

In this case, however, since supporting plates 7 constituting separate parts are fastened [to the LCD 2] after cut-out parts 8 are formed in the four corners of the LCD 2 by cutting or the like, the machining work is complicated, and the number of parts required is increased; accordingly, [such a technique] is undesirable.

[0006]

Furthermore, in the above-mentioned display device 1, rattling of the LCD 2 caused by vibration, etc., is prevented by press-fitting packing 14 between the upper cover 3 and the LCD 2. However, even though the packing 14 disposed in this manner can prevent displacement of the LCD 2 in the forward-rearward direction, this packing cannot prevent displacement in the planar direction. In actuality, therefore, the LCD 2 shows rattling, etc., in the planar direction inside the covers 3 and 4, so that the reliability of the display device 1 in terms of assembly drops as a result of positional deviation of the LCD 2. Furthermore, the "planar direction" described here refers to the two-dimensional direction parallel to the surface of the LCD 2.

[0007]

[Means for Solving the Problems]

A frame-form lower cover which is open on one side is provided, a flat-plate-form display panel whose second surface is supported by the inside surface of this lower cover is provided, a frame-form upper cover is provided in which an opening window that faces the display part on the first surface of the above-mentioned display panel is formed, and which is joined to the above-mentioned lower cover at the outer peripheral parts [of this upper cover], and elastic parts

are provided in which [i] a mounting part that is attached in a fixed manner to the inside surface of the peripheral edge part in which the opening window of the above-mentioned upper cover is formed is formed on one surface of a main body part, [ii] a holding part that positions and holds the above-mentioned display panel in contact with the outer edge part is caused to protrude inward from the above-mentioned main body part, and [iii] suction disk parts that are attached by suction in a resilient compressed state to one surface of the above-mentioned display panel are integrally formed on the other surface of the above-mentioned main body part. Furthermore, the above-mentioned display panel is supported inside the above-mentioned two covers.

[0008]

[Operation]

The elastic parts can position the display panel by means of the holding parts, and can resiliently hold the display panel by means of the suction disk parts. Accordingly, since there is no need to cut the four corners of the display panel or to fasten separate parts [to the display panel] as in conventional display devices, the productivity is good. Moreover, the elastic parts can hold the display panel in a resilient manner by means of the holding parts and suction disk parts so that displacement in both the forward-rearward direction and the planar direction is impossible. Accordingly, rattling of the display panel inside the covers is prevented, so that the reliability in terms of assembly is also good.

[0009]

[Embodiments]

An embodiment of the present device will be described based on Figure 1 through 3. First, this display device 15 has a structure in which an LCD 16 constituting a display panel is disposed between an upper cover 17 and a lower cover 18; furthermore, as in the example shown in Figure 3, this is disposed as the display device of a personal computer 19 here.

[0010]

Here, in this display device 15, as exemplified in Figures 1 and 2, the LCD 16 is formed in the form of a rectangular flat plate with a display part 20 positioned in substantially the central part. A [light-]transmitting plate 22 is mounted in a rectangular opening window 21 that is formed in the above-mentioned upper cover 17 in a position facing this display part 20. Furthermore, in this display device 15, recessed parts 23 are formed in the four corners of the back surface of the above-mentioned upper cover 17, and projecting parts 24 constituting mounting parts that are engaged with these recessed parts 23 in a manner that allows free

engagement and disengagement are formed on the surfaces of attachment rubbers 25 that constitute elastic parts. Here, in these attachment parts 25, wall-form holding parts 27 are disposed in upright positions on the two connected outer edge parts of the back surfaces of rectangular flat-plate-form main body parts 26, and four suction disk parts 28 are caused to protrude from substantially the entire area of the back surface of [each of] the above-mentioned main body parts 26.

[0011]

Furthermore, in this display device 15, the holding parts 27 of the above-mentioned attachment rubbers 25 that are mounted in a fixed manner by the engagement of the projecting parts 24 with the recessed parts 23 of the above-mentioned upper cover 17 contact the outer edge parts of the four corners of the above-mentioned LCD 16, and the above-mentioned suction disk parts 28 are attached by suction to the surfaces of the four corners of the above-mentioned LCD 16, so that this LCD 16 is positioned by the holding parts 27 of the above-mentioned attachment rubbers 25 and resiliently held by the suction disk parts 28 in a state in which the back surface [of the LCD 16] contacts the surface of the above-mentioned lower cover 18.

[0012]

In the case of such a construction, since the display part 20 of the LCD 16 faces the opening window 21 of the upper cover 17 in this display device 15, the display image of the display part 20 of this LCD 16 can be viewed via the opening window 21 in the upper cover 17.

[0013]

Furthermore, when this display device 15 is to be assembled, as illustrated in Figure 2 (a) as an example, the attachment rubbers 25 are mounted on the four corners of the upper cover 17 by engaging the projecting parts 24 with the recessed parts 23, and the LCD 16 is placed on the suction disk parts 28 of these attachment rubbers 25. Then, in this state, the lower cover 18 is joined to the upper cover 17 from above the LCD 16, so that the LCD 16 is retained and held on the surface of the lower cover 18 by the resilient force of the suction disk parts 28 of the attachment rubbers 25 that adhere tightly to the surface as exemplified in Figure 2 (b).

[0014]

Here, in this display device 15, the attachment rubbers 25 that are mounted in a fixed manner by the engagement of the projecting parts 24 with the recessed parts 23 of the upper cover 17 as described above position the LCD 16 by means of the holding parts 27 and resiliently hold the LCD 16 by means of the suction disk parts 28. As a result, in this display device 15, there is no

need to cut the four corners of the LCD 2 and fasten separate parts [to the LCD 2] as in the above-mentioned conventional display device 1. Accordingly, manufacture is easy, and the number of required parts is also reduced. Furthermore, this display device 15 is constructed so that the attachment rubbers 25 resiliently hold the LCD 16 by means of the holding parts 27 and suction disk parts 28 in such a manner that displacement is impossible in both the forward-rearward direction and planar direction. Accordingly, rattling of the LCD 16 inside the covers 17 and 18 is prevented, so that the reliability in terms of assembly is good.

[0015]

Furthermore, in the display device 15 of the present embodiment, an LCD 16 was indicated as an example of the flat-plate-form display panel. However, the present device can also be applied to a plasma display or electrochromic display, etc.

[0016]

[Effect of the Device]

In the present device, as was described above, frame-form lower cover which is open on one side is provided, a flat-plate-form display panel whose second surface is supported by the inside surface of this lower cover is provided, a frame-form upper cover is provided in which an opening window that faces the display part on the first surface of the above-mentioned display panel is formed, and which is joined to the above-mentioned lower cover at the outer peripheral parts [of this upper cover], and elastic parts are provided in which [i] a mounting part that is attached in a fixed manner to the inside surface of the peripheral edge part in which the opening window of the above-mentioned upper cover is formed is formed on one surface of a main body part, [ii] a holding part that positions and holds the above-mentioned display panel in contact with the outer edge part is caused to protrude inward from the above-mentioned main body part, and [iii] suction disk parts that are attached by suction in a resilient compressed state to one surface of the above-mentioned display panel are integrally formed on the other surface of the above-mentioned main body part. Furthermore, the above-mentioned display panel is supported inside the above-mentioned two covers. As a result, [the present device] has the following effects: namely, these elastic parts can position the display panel by means of the holding parts, and can resiliently hold the display panel by means of the suction disk parts, so that there is no need to cut the four corners of the display panel and fasten separate parts [to the display panel] as in a conventional display device. Accordingly, the productivity is good. In addition, since the elastic parts can resiliently hold the display panel by means of the holding parts and suction disk parts in such a manner that displacement is impossible in both the forward-rearward direction

and planar direction, rattling of the display panel inside the covers is prevented, so that the reliability in terms of assembly is also good.